

**WEST**

## Freeform Search

**Database:**

US Patents Full-Text Database  
US Pre-Grant Publication Full-Text Database  
JPO Abstracts Database  
EPO Abstracts Database  
Derwent World Patents Index  
IBM Technical Disclosure Bulletins

**Term:**

L8 & L7

**Display:**

10

**Documents in Display Format:**

-

**Starting with Number**

1

**Generate:**

☐ Hit List ☒ Hit Count ☐ Side by Side ☐ Image

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### Search History

**DATE:** Tuesday, August 12, 2003   [Printable Copy](#)   [Create Case](#)

**Set Name Query**  
side by side

**Hit Count Set Name**  
result set

*DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=OR*

<u>L11</u>	L10 and aberration SAME zoom\$3	1	<u>L11</u>
<u>L10</u>	L8 & L7	13	<u>L10</u>
<u>L9</u>	L8 & L7 & L2	1	<u>L9</u>
<u>L8</u>	L3 & L5 & L6	36	<u>L8</u>
<u>L7</u>	(ring NEAR5 mov\$5) SAME (stationary or fixed) ADJ barrel	229	<u>L7</u>
<u>L6</u>	(ring NEAR5 mov\$5) WITH rotat\$3	17965	<u>L6</u>
<u>L5</u>	(protru\$5 or project\$4) SAME groove\$1 SAME cam\$1 SAME linear\$2 SAME rotat\$4	370	<u>L5</u>
<u>L4</u>	(protru\$5 or project\$4) SAME groove\$1 SAME cam\$1 SAME linear\$2 SAME rotat\$4 SAME (annular\$2 or circumferen\$6)	124	<u>L4</u>
<u>L3</u>	peripher\$4 SAME cam\$1 SAME relat\$5 SAME follower\$1	1532	<u>L3</u>
<u>L2</u>	aberration\$1 SAME eccentric\$5 SAME zoom\$3	47	<u>L2</u>
<u>L1</u>	aberration\$1 SAME eccentric\$5 SAME zoom\$3 SAME cam\$1 SAME focal	2	<u>L1</u>

END OF SEARCH HISTORY

**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 2 of 2 returned.**☐ 1. Document ID: US 20020105731 A1

L1: Entry 1 of 2

File: PGPB

Aug 8, 2002

PGPUB-DOCUMENT-NUMBER: 20020105731

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020105731 A1

TITLE: Lens barrel

PUBLICATION-DATE: August 8, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Iikawa, Makoto	Saitama		JP	
Hamasaki, Takuji	Saitama		JP	

US-CL-CURRENT: [359/694](#); [359/702](#), [359/703](#), [359/704](#), [359/706](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC
<a href="#">Draw</a>	<a href="#">Desc</a>	<a href="#">Image</a>									

☐ 2. Document ID: US 4639095 A

L1: Entry 2 of 2

File: USPT

Jan 27, 1987

US-PAT-NO: 4639095

DOCUMENT-IDENTIFIER: US 4639095 A

TITLE: Telephoto zoom lens

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC
<a href="#">Draw</a>	<a href="#">Desc</a>	<a href="#">Image</a>									

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Terms	Documents
aberration\$1 SAME eccentric\$5 SAME zoom\$3 SAME cam\$1 SAME focal	2

**Display Format:**

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**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 1 of 1 returned.**☐ 1. Document ID: US 20020105731 A1

L11: Entry 1 of 1

File: PGPB

Aug 8, 2002

PGPUB-DOCUMENT-NUMBER: 20020105731

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020105731 A1

TITLE: Lens barrel

PUBLICATION-DATE: August 8, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Iikawa, Makoto	Saitama		JP	
Hamasaki, Takuji	Saitama		JP	

US-CL-CURRENT: [359/694](#); [359/702](#), [359/703](#), [359/704](#), [359/706](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWC
Draw Desc	Image									

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Terms	Documents
L10 and aberration SAME zoom\$3	1

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**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 10 of 13 returned.**☐ 1. Document ID: US 20030117725 A1

L10: Entry 1 of 13

File: PGPB

Jun 26, 2003

PGPUB-DOCUMENT-NUMBER: 20030117725  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030117725 A1

TITLE: LENS BARREL

PUBLICATION-DATE: June 26, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Nomura, Hiroshi	Saitama		JP	
Yamazaki, Yoshihiro	Saitama		JP	
Okuda, Isao	Saitama		JP	
Nakamura, Satoru	Tokyo		JP	

US-CL-CURRENT: [359/819](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

[KWC](#)☐ 2. Document ID: US 20030112526 A1

L10: Entry 2 of 13

File: PGPB

Jun 19, 2003

PGPUB-DOCUMENT-NUMBER: 20030112526  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030112526 A1

TITLE: Lens barrel

PUBLICATION-DATE: June 19, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Nomura, Hiroshi	Saitama		JP	
Yamazaki, Yoshihiro	Saitama		JP	
Okuda, Isao	Saitama		JP	
Nakamura, Satoru	Tokyo		JP	

US-CL-CURRENT: [359/700](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

[KWC](#)

☐ 3. Document ID: US 20030081948 A1

L10: Entry 3 of 13

File: PGPB

May 1, 2003

PGPUB-DOCUMENT-NUMBER: 20030081948  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030081948 A1

TITLE: Lens barrel

PUBLICATION-DATE: May 1, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Nomura, Hiroshi	Saitama		JP	
Sasaki, Takamitsu	Saitama		JP	
Ishizuka, Kazunori	Kanagawa		JP	

US-CL-CURRENT: 396/72

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 4. Document ID: US 20030081329 A1

L10: Entry 4 of 13

File: PGPB

May 1, 2003

PGPUB-DOCUMENT-NUMBER: 20030081329  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030081329 A1

TITLE: Lens barrel

PUBLICATION-DATE: May 1, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Nomura, Hiroshi	Saitama		JP	
Sasaki, Takamitsu	Saitama		JP	
Ishizuka, Kazunori	Kanagawa		JP	

US-CL-CURRENT: 359/700

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 5. Document ID: US 20030081328 A1

L10: Entry 5 of 13

File: PGPB

May 1, 2003

PGPUB-DOCUMENT-NUMBER: 20030081328  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030081328 A1

TITLE: Lens barrel

PUBLICATION-DATE: May 1, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Nomura, Hiroshi	Saitama		JP	
Sasaki, Takamitsu	Saitama		JP	
Ishizuka, Kazunori	Kanagawa		JP	

US-CL-CURRENT: 359/700

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

☐ 6. Document ID: US 20030081327 A1

L10: Entry 6 of 13

File: PGPB

May 1, 2003

PGPUB-DOCUMENT-NUMBER: 20030081327

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030081327 A1

TITLE: Lens barrel

PUBLICATION-DATE: May 1, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Nomura, Hiroshi	Saitama		JP	
Sasaki, Takamitsu	Saitama		JP	
Ishizuka, Kazunori	Kanagawa		JP	

US-CL-CURRENT: 359/700

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

☐ 7. Document ID: US 20030081325 A1

L10: Entry 7 of 13

File: PGPB

May 1, 2003

PGPUB-DOCUMENT-NUMBER: 20030081325

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030081325 A1

TITLE: Lens Barrel

PUBLICATION-DATE: May 1, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Nomura, Hiroshi	Saitama		JP	
Sasaki, Takamitsu	Saitama		JP	
Ishizuka, Kazunori	Kanagawa		JP	

US-CL-CURRENT: 359/700

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWC
Drawn Desc	Image									

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☐ 8. Document ID: US 20030007796 A1

L10: Entry 8 of 13

File: PGPB

Jan 9, 2003

PGPUB-DOCUMENT-NUMBER: 20030007796

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030007796 A1

TITLE: Zoom lens of a camera

PUBLICATION-DATE: January 9, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Nomura, Hiroshi	Saitama		JP	
Azegami, Kazuyoshi	Tokyo		JP	

US-CL-CURRENT: 396/72

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWC
Drawn Desc	Image									

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☐ 9. Document ID: US 20020135898 A1

L10: Entry 9 of 13

File: PGPB

Sep 26, 2002

PGPUB-DOCUMENT-NUMBER: 20020135898

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020135898 A1

TITLE: Lens barrel

PUBLICATION-DATE: September 26, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Nomura, Hiroshi	Saitama		JP	
Yamazaki, Yoshihiro	Saitama		JP	
Okuda, Isao	Saitama		JP	
Nakamura, Satoru	Tokyo		JP	

US-CL-CURRENT: 359/819; 359/699, 359/700, 359/701, 359/704, 359/705, 359/706, 359/821, 359/822, 359/823

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWC
Drawn Desc	Image									

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☐ 10. Document ID: US 20020135888 A1

L10: Entry 10 of 13

File: PGPB

Sep 26, 2002



PGPUB-DOCUMENT-NUMBER: 20020135888  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020135888 A1

TITLE: Lens barrel having a lens barrier mechanism

PUBLICATION-DATE: September 26, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Nomura, Hiroshi	Saitama		JP	
Yamazaki, Yoshihiro	Saitama		JP	
Okuda, Isao	Saitama		JP	
Nakamura, Satoru	Tokyo		JP	

US-CL-CURRENT: 359/700; 359/701, 359/704, 359/705, 359/706, 359/819, 359/822, 359/823,  
359/825, 359/830

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

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L10: Entry 11 of 13

File: PGPB

Aug 22, 2002

PGPUB-DOCUMENT-NUMBER: 20020114087

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020114087 A1

TITLE: Varifocal lens barrel and a lens drive mechanism

PUBLICATION-DATE: August 22, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Iikawa, Makoto	Saitama		JP	
Hamasaki, Takuji	Saitama		JP	

US-CL-CURRENT: [359/823](#); [359/699](#), [359/700](#), [359/701](#), [359/825](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	RWC
Draw Desc	Image									

☐ 12. Document ID: US 20020105731 A1

L10: Entry 12 of 13

File: PGPB

Aug 8, 2002

PGPUB-DOCUMENT-NUMBER: 20020105731

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020105731 A1

TITLE: Lens barrel

PUBLICATION-DATE: August 8, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Iikawa, Makoto	Saitama		JP	
Hamasaki, Takuji	Saitama		JP	

US-CL-CURRENT: [359/694](#); [359/702](#), [359/703](#), [359/704](#), [359/706](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	RWC
Draw Desc	Image									

☐ 13. Document ID: US 6333825 B1

L10: Entry 13 of 13

File: USPT

Dec 25, 2001

US-PAT-NO: 6333825  
DOCUMENT-IDENTIFIER: US 6333825 B1  
TITLE: Vari-focal lens

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWC
Draw	Desc	Image								

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Terms	Documents
L8 & L7	13

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